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ABSTRACT

The purpose of this study was to determine if students enrolled at Central Florida Community College (CFCC) who receive financial aid withdraw from college credit classes at a significantly higher rate than those not receiving such aid. A secondary purpose was to determine if GI Bill recipients withdraw at a significantly higher rate than other students receiving financial aid. Using institutionally collected and maintained computerized student data, withdrawal rates for 1974-75 academic year at CFCC were analyzed. Data tabulations were compiled for all students, financial aid recipients, and GI Bill recipients. The z-test statistical technique was used in the comparative analysis of withdrawal rates. Results of the analysis revealed that there were no significant differences in the withdrawal rates of financial aid recipients and non-financial aid recipients, and that GI Bill recipients did not exhibit a significantly higher withdrawal rate than other financial aid recipients. It is recommended that other community colleges perform similar studies so that an adequate empirical data base, upon which policy and planning decisions could be based, might be established. (Author/JDS)

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ANALYSIS OF WITHDRAWAL RATES OF STUDENTS RECEIVING FINANCIAL AID AT CENTRAL FLORIDA COMMUNITY COLLEGE

by

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Central Florida Community College

A PRACTICUM PRESENTED TO NOVA UNIVERSITY
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ABSTRACT

The purpose of the paper was to determine if students enrolled at Central Florida Community College who receive financial aid withdraw from college credit classes at a significantly higher rate than those not receiving financial aid. A secondary purpose was to determine if G. I Bill recipients withdraw from college credit classes at a significantly higher rate than all other students receiving financial aid.

The objective of the study is to make those agencies that issue financial aid realize the importance of monitoring the production of financial aid recipients.

An analysis of withdrawal rates for the 1974-1975 academic year at Central Florida Community College was made. Data was collected from magnetic disk files and punched card files using a Xerox 530 computer. Data tabulations were compiled for all students, financial aid recipients, and G. I. Bill recipients. Significant differences in withdrawal rates were analyzed through the use of z-Test statistical techniques.

There were no significant differences calculated to support the hypotheses stated in this paper. Results of this study were used in helping to formulate a student progress policy at CFCC.

I. STATEMENT OF THE PROBLEM

Financial aid in the form of scholarships, grants, and loans is received by many students attending Central Florida Community College. Sources of financial aid are from the public and private sectors. Recipients may be designated by the college or by the granting agency itself.

Are students receiving financial aid at Central Florida Community College withdrawing from credit classes in which they have enrolled at a higher rate than those students not receiving financial aid? Are students attending Central Florida Community College receiving financial aid from the U. S. Veterans Administration (G. I. Bill) withdrawing from classes at a higher rate than all others receiving financial aid?

The State of Florida measures productivity as the number of college credits earned. College credits are earned by receiving a passing grade for the course in which enrolled. Withdrawal from the course results in no measurable productivity.

II. HYPOTHESIS

Students receiving financial aid withdraw from college credit classes at a significantly higher rate than those students not receiving financial aid.

G. I. Bill recipients will withdraw from college credit classes at a significantly higher rate than all others receiving financial aid.

III. BACKGROUND AND SIGNIFICANCE

The granting of financial aid and student withdrawal rates are two highly controversial aspects of Community College Education today. The reasons for students withdrawing are both many and varied. Numerous research papers have been written to determine those reasons. Financial aid granted to community college students has become the rule rather than the exception. A survey of educational journals has yielded no indication of financial aid having an effect on withdrawal rates.

During the 1974-1975 academic year approximately 55% of the students enrolled at Central Florida Community College were recipients of some type of financial aid. This 55% figure does not represent 350 or so students attending the college under the G. I. Bill. Total income from tuition fees for 1974-1975 was $432,708. Of that amount, $260,754 consisted of financial aid in the form of loans, grants-in-aid, and scholarships. A breakdown of the financial aid sources and amounts is as follows:

National Direct Student Loans	$19,300
Supplemental Educational Opportunity Grants	15,090
Work Study	41,800
CFCC Work Study	25,000
Basic Educational Opportunity Grants	92,000
Adult Offender Act	17,236

Law Enforcement Educational Program	18,400
Fee Waivers	22,000
Federal Nursing Scholarships	9,924

The trend toward financial aid is steadily increasing; as an example, during the Fall term, 1975-1976, Basic Educational Opportunity Grants accounted for $84,050 in tuition fee income as compared to $92,000 for the entire 1974-1975 academic year. Another new form of financial aid is the federal and state supported Manpower program. This program pays recipients a "salary" of $2.10 per hour for each hour spent in class or labs. It also provides payment for time spent doing homework assignments which necessitate spending time at college facilities. i.e. typing, keypunching, adding machines, etc.

Central Florida Community College provides the following policy for adding and dropping courses:

[1]Courses may be added and/or dropped during appropriate periods as indicated on the college academic calendar. Courses dropped at the student's initiative after the initial Add and Drop period and before the end of the official withdrawal date will be recorded with the letter "W" on the students permanent record unless his instructors have previously dropped him with "F" grades.

The following dates are from the 1974-1975 CFCC academic calendar:

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[1]Central Florida Community College Catalog 1974-1975, (Ocala, Florida), p. 63.

	Term 1	Term 2	Term 3	Term 4
Classes Begin	8/26	1/6	5/5	6/17
Last Withdrawal Date	12/4	4/5	6/6	7/22
Classes End	12/18	4/29	6/13	7/29

Policy as to absences and attendance are as follows:

[2]Regular class attendance is strongly encouraged by the college as a general academic policy. In addition, for administrative reasons, e.g., when requested by parents or outside agencies such as the Veterans Administration, the college has to know if a student has been attending classes regularly. At the beginning of each term, instructors must announce in writing specific attendance policies for each class. The instructor should consult with the student and/or the student's counselor when excessive absenteeism is judged to be a factor in the student's not achieving his potential. In cases where absenteeism cannot be resolved, the instructor may drop the student from the course with or without penalty.

"W" grades are not used in the calculating of a students grade - point average. Academic probation and/or suspension are solely a function of GPA. Therefore a student who continues to withdraw from classes may enroll each term without being subjected to academic discipline.

The community college "open door" policy and Central Florida Community College's withdrawal policy are obviously important factors in the schools withdrawal rate. However, financial aid has

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[2]Ibid. p. 61.

opened the "door" to many people who are not academically prepared to undertake college level scholastic responsibilities.

The State of Florida's Department of Education requires each community college to report its enrollment in student semester hours for funding purposes at the beginning of each term. A second report, required as a part of Programmed Planning and Budgeting (PPBS), OA-1, requires that output, as a function of student semester hours completed with a passing grade (A, B, C, or D) be reported. While the state requires these reports, no information has been received, critical or otherwise, concerning the difference between the student semester hours enrolled in and the student semester hours completed. This difference can be used to determine the withdrawal rate.

Recipients of financial aid have a obligation to their benefactors to produce to the best of there abilities. If they do not meet this obligation, financial aid must be terminated. At this time withdrawal rates are not used as a criteria for renewal of financial aid.

[3]The U. S. Veterans Administration will pay $6.2 billion to veterans for G. I. Bill educational grants during this fiscal year. During the Spring of 1975 1,800,000 veterans were receiving G. I. Bill financial aid. A single recipient with no dependents will receive $270 per month. Married couples both receiving G. I. Bill benefits with 2 dependents can receive over $700 per month. The V. A. does little or no monitoring of the academic progress of G. I. Bill recipients. There were approximately 350 students

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[3]Karen J. Winkler, "Mustering Out the G. I. Bill," Chronicle of Higher Education, XI (October 14, 1975), p. 1.

attending CFCC during the 1974-1975 academic year who were receiving G. I. Bill financial aid.

If a G. I. Bill recipient withdraws from a class, the college is supposed to report the fact to the Veterans Administration so benefits can be stopped. But unless the recipient tells the college he is withdrawing, most institutions leave it up to their individual instructors to determine whether a student is still enrolled in a class.

The fifteen week withdrawal period makes it easy to comply with this regulation. If G. I. Bill recipients have the highest withdrawal rate of those receiving financial aid, the Veterans Administration must be made aware of the misuse of federal funds.

Veterans Administration Regulation 14253 Accredited Courses (3) states: The school must enforce a policy relative to standards of conduct and progress required of the student. The school policy relative to standards of progress must be specific enough to determine the point in time when educational benefits should be discontinued.

V. A. Regulation 14253 has not been enforced as of the Fall 1975-1976 term. No policy governing a students progress has been developed by the State of Florida's Division of Community Colleges or by any of the 28 individual schools in the division.

A memo dated October 7, 1975 from Lee G. Henderson, Director of the Division of Community Colleges, State of Florida, entitled, "System for Measuring Student Progress" brought the above problem into the spotlight. It called for the establishment of a Student

Progress Quotient to be used as a criteria for measuring the progress of all students enrolled in the states' community college system. A tabulation of Student Progress Quotients for the 1974-1975 was a byproduct of this report.

This report was presented to the Central Florida Community College ad hoc committee responsible for formulating a student progress policy for the college.

Additionally, a copy of the report was sent to the Division of Community Colleges. The paper was requested by the division. No other community college in Florida has any empirical data substantiating their student progress policies. As of December 15, 1975, the Veterans Administration has rejected student progress policy proposals from every community college which has submitted one. Twenty-five proposals habe been rejected to date. Central Florida Community College will make its proposal during the month of January 1976.

IV. DEFINITION OF TERMS

For the purposes of this study the following terms are defined:

(1) Withdrawal rates (WR) is the total semester hours enrolled in which the grades A-D, or W have been granted divided into the total semester hours of W grades. i.e. If a student has enrolled for 18 semester hours of credit and has withdrawn from 6 semester hours, the withdrawal rate would be $\frac{6}{18}$ = 33 1/3% or .333.

(2) Financial aid recipients are those students who have received financial aid that has been recorded at the time they have enrolled each semester.

(3) G. I. Bill recipients are those veterans or dependents of veterans who are receiving financial benefits from the U. S. Veterans Administration. G. I. Bill recipients will also be referred to as VA recipients in the text of this paper.

(4) Students enrolled at Central Florida Community College for the purposes of this study are those enrolled in college credit courses during the 1974-1975 academic year. Students enrolled in adult education programs, area vocational schools, or other non-academic areas will not be considered in this study.

(5) Student Progress Quotient (SPQ) is the number of credits enrolled in except where an N or I grade has been made divided into the number of credits earned with grades A-D.

i.e. 18 credits enrolled, 12 credits A-D, 6 credits W

SPQ = $\frac{12}{18}$ = 66 2/3% or .667

(6) Open door policy refers to Central Florida Community College's admissions policy which in effect states that all high school graduates will be admitted regardless of prior academic achievement.

(7) SSH as used on tables refers to student semester hours.

(8) Term 1 refers to the Fall Semester.

Term 2 refers to the Spring Semester.

Term 3 refers to the first Summer Semester.

Term 4 refers to the second Summer Semester.

V. LIMITATIONS OF THE STUDY

This analysis uses information compiled during the 1974-1975 academic year at Central Florida Community College. Students receiving financial aid directly from outside agencies were grouped with students not receiving financial aid. This is because the college does not administer financial aid of this kind and hence no records of it are kept.

Financial aid recipients who receive aid after the registration period each term were also grouped with students not receiving financial aid. This includes all work-study recipients, adult offenders, and law enforcement educational recipients. This fact significantly reduces the number of financial aid recipients whose records were available for this study.

This study attempts to show a high withdrawal rate as a function of financial aid. Moderator variables such as age, socio-economic status, etc. were not considered. However, it must be mentioned that financial aid in itself is not a direct cause of withdrawal from class.

Grades A through D counts as an indication of completion of a course. A W grade indicates a withdrawal. Grades I (Incomplete), F (Failure) and N (No grade, course must be repeated) were not counted in the analysis. These last three grades earn no credits for the students receiving them, but cannot be counted as withdrawals. The F grade was used in calculation of the Student Progress Ratio SPQ.

VI. BASIC ASSUMPTIONS

For the purpose of this study the following assumptions are made:

(1) The 1974-1975 academic year at Central Florida Community College was a typical year. That is, no new programs, withdrawal policies, sources of students, etc., influenced withdrawal rates during the year.

(2) The financial aid recipients who are recorded at the beginning of each term and are categorized as such by this study are a representative sample of all financial aid recipients during the 1974-1975 academic year.

(3) There are no significant differences in socio-economic background and intelligence between the groups used in this study.

(4) G. I. Bill recipients also have no appreciable difference in their backgrounds which effects this study.

VII. DATA COLLECTION

Information was tabulated in order to determine the rate of withdrawals of various categories of students at Central Florida Community College.

Withdrawal rates were calculated for terms 1, 2, 3A, and 3B of the 1974-1975 academic year. Categories of students were all students enrolled, students not receiving financial aid, all students receiving financial aid, and G. I. Bill recipients. Final grades of A, B, C, and D will be counted as completed credits. A final grade W is a withdrawal. Any other final grade will be disregarded.

Central Florida Community College maintains historical academic files for all students who have been enrolled there. These files are stored on magnetic disk packs which may be accessed by a Xerox 530 computer. Records on the file are in the following format:

Position	
1	Student Number - 5 digits
2	Year and Term i.e. For purposes of this analysis valid year term would be 741, 742, 743, and 744.
3 - 8	Course Code
9	Section
10	Credit Hours

11	Mid-Term Grade
12	Final Grade
13	Not Used

Positions 3 through 13 are repeated three times on each record. Files are in year and term within student number sequence. This file contains no information as to whether or not the student has been a recipient of financial aid.

Financial aid recipients are identified by codes punched in cols. 32 - 34 and cols. 76 - 77 on fee receipt cards. One or more fee receipt cards are punched for each student enrolling at CFCC each term.

G. I. Bill recipients are not identified specifically on any data files at CFCC. It was necessary to pull names from an index card file kept by the Veterans counsellor. These names were then used to manually pull fee receipt cards which were used in data collections.

A Fortran IV program was written to tabulate data. Fee receipt cards were used to pick financial aid and G. I. Bill recipients. Distribution tables for the four groups of students to be analyzed were as follows:

Semester Hours	Students Enrolled	SSH Enrolled	SSH W Grades	WR	SPQ
23					
22					
1					

VIII. PROCEDURES FOR TREATING DATA

When all the data was tabulated, withdrawal rates were calculated for each group in the following way:

A withdrawal rate for each term.

A withdrawal rate for each group.

The null hypothesis is that there are no significant differences between withdrawal rates of any of the groups. The alternate hypothesis is that withdrawal rates for financial aid recipients and/or G. I. Bill recipients is higher than those not receiving financial aid.

As withdrawal rates represent a calculated proportion which is independent of any normal distribution of data, a non-parametric statistical technique must be used to test for significant differences between the groups studied. Therefore, the z-test was used at an .05 level of significance. This means that in order for the null hypothesis to be rejected and the alternate hypotheses accepted the calculated z value must exceed +1.96 or -1.96.

Additional z-tests were employed to check levels of significant differences in withdrawal rates from term to term.

These tests while not directly involved in this study were of value in establishing a SPQ student for Central Florida Community College.

Similar tests were conducted using the calculated SPQ's instead of the withdrawal rates. The inclusion of the "F" grade in the SPQ calculation made the SPQ different from being an inverse of the withdrawal rate.

The following formulas were used in conducting z-tests for withdrawal rates.

$$P1 = \frac{\text{Financial aid "W" credits (W1)}}{\text{Total Financial aid credits (N1)}}$$

$$P2 = \frac{\text{Non-financial aid "W" credits (W2)}}{\text{Total non-financial aid credits (N2)}}$$

$$\bar{p} = \frac{w\,1 + w\,2}{n\,1 + n\,2} \qquad \bar{\bar{q}} = 1 - \bar{p}$$

$$z = \frac{P1 - P2}{\sqrt{\frac{PQ}{N1} + \frac{PQ}{N2}}}$$

IX. RESULTS

After all data was tabulated, withdrawal rates (WR) and student progress quotients (SPQ) were calculated for each of the four groups under investigation. The calculations were then used in testing the hypothesis as stated in Chapter II of this paper.

The WR for non-financial aid recipients (Table 2) was calculated to be greater than the WR for financial aid recipients (Table 3). Therefore by observation, the hypothesis which states that financial aid recipients have a WR greater than those students not receiving financial aid was rejected. In testing for a significant difference between the WR's for the two groups, the calculated z was 1.853. Therfore, as the calculated z does not exceed the critical z of $\pm$ 1.96, the null hypothesis is not rejected. The difference in WR's between the groups is not significant because it can occur more than 5% of the time due to chance.

The WR for financial aid recipients (Table 3) was calculated to be greater than the WR for VA G. I. Bill recipients (Table 4). Therefore by observation, the hypothesis which states that VA G. I. Bill recipients will have a WR greater than all others receiving financial was rejected. In testing for a significant difference between the WR's for the two groups, the calculated z was .9491. Therefore, as the calculated z does not exceed the critical z of $\pm$ 1.96, the null hypothesis is not rejected. The difference in WR's between the groups is not significant because

it can occur more than 5% of the time due to chance.

The lowest WR of the four groups was the .153 calculated for the VA recipients. The WR for all students sampled (Table 1) was .163. The only significant difference found between any of the groups was a calculated z of 2.53 when the non-financial aid recipients were compared to G. I. Bill recipients.

Non-financial aid recipients were compared to financial aid recipients on a term by term basis (Table 5). For terms 1 and 2, non-financial aid recipients had a higher WR than the financial aid recipients. For terms 3 and 4, there was a reversal in form with the financial aid recipients having the higher WR. The differences were significant ($z > \pm 1.96$) in all but term 2.

VA G. I. Bill recipients were compared to financial aid recipients on a term by term basis. For terms 1 and 2 VA G. I. Bill recipients had a higher WR than the financial aid recipients. However, neither term was significantly different from the other.

Financial aid recipients had significantly higher WR's than G. I. Bill recipients for terms 3 and 4. Calculated z's were 2.25 and 3.99 respectively. These significant differences for the summer semesters explain why the hypothesis as stated concerning the relationship between financial recipients and G. I. Bill recipients was rejected. A graphical representation of WR differences for the four groups by term is depicted in Figure 1.

Student Progress Quotients (SPQ) are also found on Tables 1 through 5. When differences between the four groups were tested against the critical z-value, none were found to be significantly

different. The highest SPQ for any group was .825 for the VA G. I. Bill recipients. The SPQ for all students enrolled at Central Florida Community College for the 1974-1975 year was .819. Figure 2 depicts graphically the differences by term for the four groups studied.

Figure 3 graphically represents the SPQ for all students as a function of the number of semester hours enrolled.

Table 1. Withdrawal Rates (WR) and Student Progress Quotients (SPQ) for ALL Students Enrolled in Central Florida Community College 1974-1975

Semester Hours	Students Enrolled	SSH Enrolled	SSH W Grades	WR	SPQ
23	1	23	4	.174	.826
22	7	154	22	.143	.732
21	48	1008	172	.171	.813
20	43	860	73	.085	.915
19	76	1444	160	.110	.864
18	245	4410	578	.131	.862
17	163	2771	330	.119	.856
16	216	3456	567	.164	.822
15	492	7380	1043	.141	.829
14	176	2464	415	.164	.824
13	178	2314	357	.154	.841
12	395	4740	865	.182	.791
11	46	506	66	.130	.772
10	67	670	141	.210	.769
9	344	3096	660	.213	.769
8	80	640	108	.169	.825
7	89	623	99	.159	.836
6	873	5238	1014	.194	.790
5	65	325	54	.166	.827
4	118	472	43	.091	.910
3	750	2250	513	.228	.769
2	10	20	8	.400	.600
1	12	12	5	.416	.500
TOTALS	4494	44876	7297	.163	.819

Table 2. Withdrawal Rates (WR) and Student Progress Quotients (SPQ) for Non-financial Aid Recipients Enrolled in Central Florida Community College 1974-5

Semester Hours	Students Enrolled	SSH Enrolled	SSH W Grades	WR	SPQ
23					
22	5	110	27	.245	.757
21	29	609	127	.208	.765
20	28	550	51	.091	.908
19	50	950	126	.133	.851
18	166	2988	393	.131	.867
17	112	1904	225	.118	.868
16	144	2304	396	.171	.814
15	328	4920	683	.138	.830
14	118	1652	277	.167	.825
13	112	1456	227	.155	.834
12	207	2484	482	.194	.767
11	37	407	60	.147	.751
10	49	490	82	.167	.766
9	224	2016	464	.230	.766
8	61	488	100	.205	.789
7	70	490	75	.153	.829
6	541	3246	670	.206	.780
5	51	255	39	.152	.857
4	84	336	20	.059	.920
3	497	1491	321	.215	.788
2	8	16	6	.375	.625
1	10	10	4	.400	.500
TOTALS	2931	29182	4845	.166	.818

Table 3. Withdrawal Rates (WR) and Student Progress Quotients (SPQ) for all Financial Aid Recipients Enrolled in Central Florida Community College 1974-5

Semester Hours	Students Enrolled	SSH Enrolled	SSH W Grades	WR	SPQ
23	1	23	4	.173	.826
22	2	44	5	.113	.886
21	17	357	45	.126	.873
20	12	240	16	.066	933
19	23	437	34	.077	.907
18	68	1224	158	.129	.852
17	41	697	76	.109	.844
16	59	944	140	.148	.831
15	124	1860	295	.158	.820
14	48	672	101	.150	.836
13	45	585	59	.100	.888
12	113	1356	249	.183	.805
11	9	99	6	.060	.859
10	14	140	56	.400	.514
9	80	720	139	.193	.773
8	10	80	8	.100	.888
7	10	70	13	.185	.793
6	196	1176	204	.173	.802
5	9	45	10	.222	.666
4	11	44	16	.363	.777
3	204	612	174	.284	.700
2	1	2	2	1.000	.000
1	2	2	1	.500	.5000
TOTALS	1099	11429	1811	.158	.822

Table 4. Withdrawal Rates (WR) and Student Progress Quotients (SPQ) for all GI Bill Recipients Enrolled in Central Florida Community College 1974-5

Semester Hours	Students Enrolled	SSH Enrolled	SSH W Grades	WR	SPQ
23					
22					.272
21	6	126	18	.142	.857
20	3	60	6	.100	.900
19	3	57	0	.000	.750
18	16	288	50	.173	.815
17	12	204	37	.181	.764
16	16	256	55	.214	.800
15	56	840	101	.120	.847
14	15	210	62	.295	.730
13	28	364	84	.230	.799
12	119	1428	180	.126	.859
11	1	11	0	.000	.818
10	7	70	3	.042	.837
9	75	675	106	.157	.777
8	12	96	0	.000	1.000
7	16	112	17	.151	.838
6	208	1248	212	.169	.824
5	8	40	5	.125	.875
4	31	124	15	.120	.879
3	72	216	33	.152	.808
2	1	2	0	.000	1.000
1	1	1	0	.000	1.000
TOTALS	706	6428	984	.153	.825

Table 5. Withdrawal Rates (WR) and Student Progress Quotients (SPQ) for the four groups tabulated. Central Florida Community College 1974-1975

GROUP	Term 1			Term 2			Term 3			Term 4		
	SSH	WR	SPQ	SSH	WR	SPQ	SSH	WR	SPQ	SSH	WR	SPQ
ALL	18226	.170	.815	19856	.170	.810	3456	.089	.891	3338	.150	.838
NON FA/VA	12506	.180	.802	11977	.173	.810	2367	.081	.905	2332	.133	.858
FA	4529	.145	.846	5941	.163	.812	451	.149	.814	508	.234	.744
VA	1729	.154	.832	3097	.167	.863	824	.106	.863	778	.147	.831

Figure 1. Student Progress Quotients (SPQ) by Term
Central Florida Community College 1974-1975

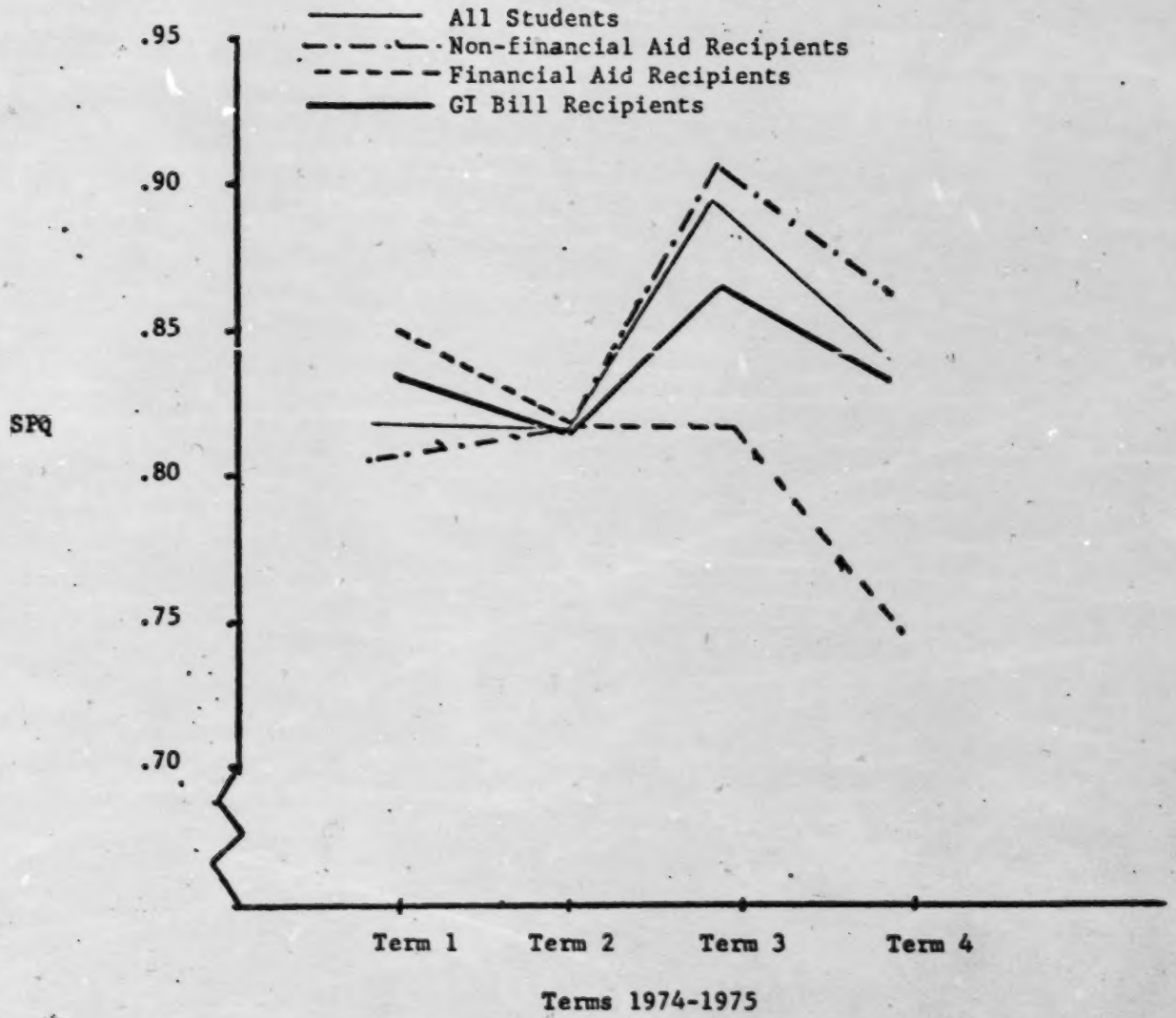


Figure 2. Withdrawal Rates (WR) by Term
Central Florida Community College 1974-1975

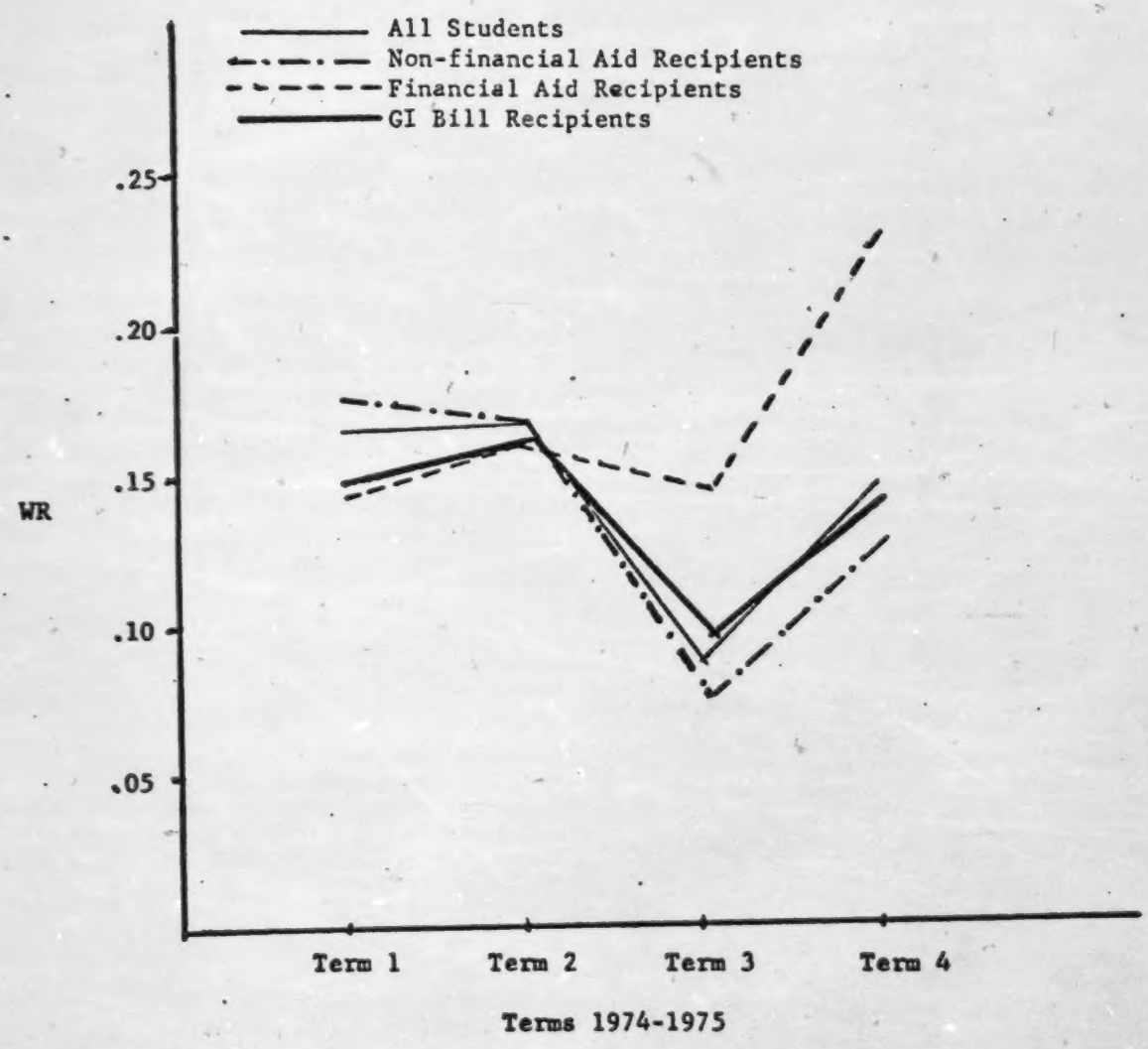
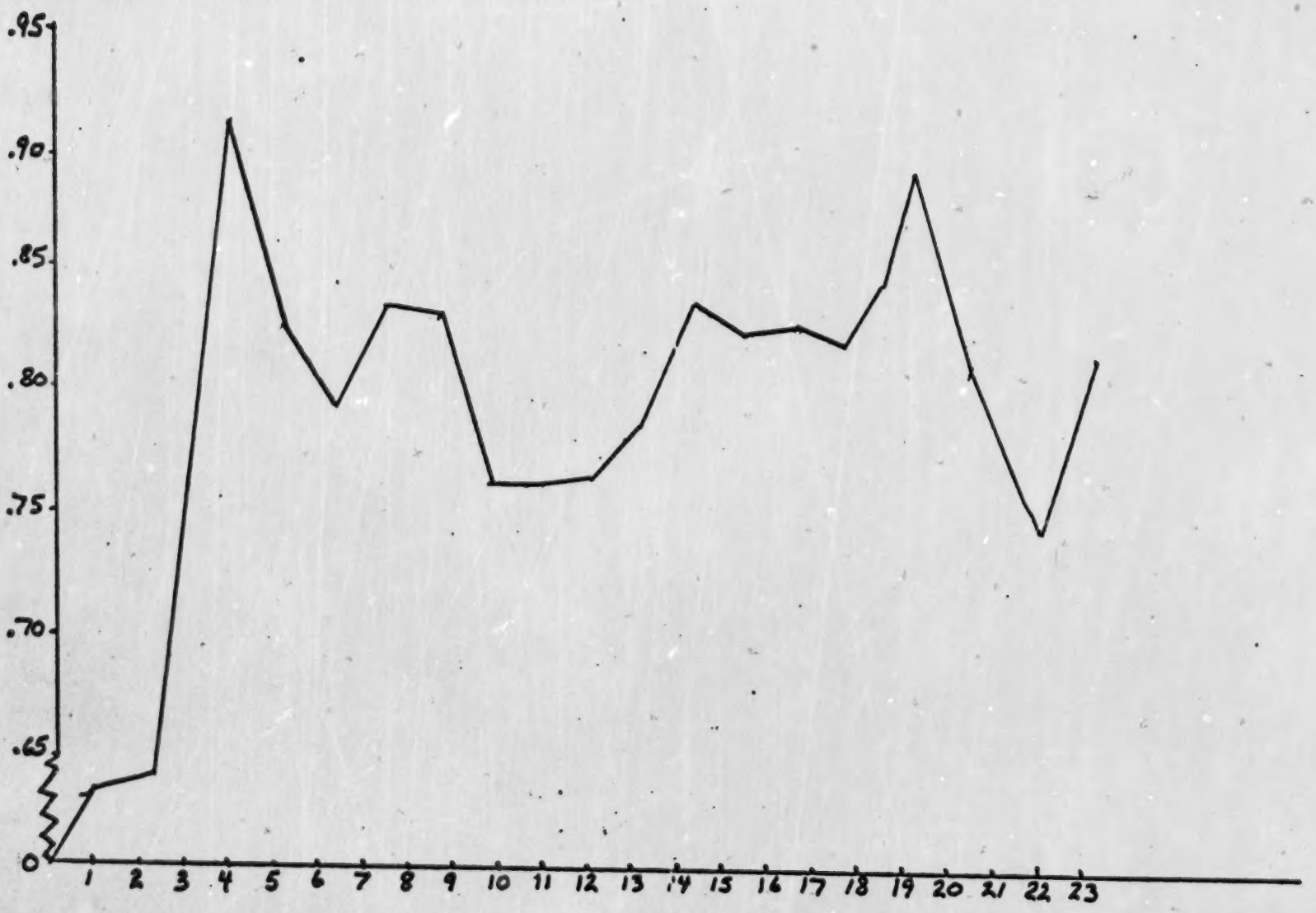


Figure 3. Student Progress Quotients (SPQ) as a Function of Semester Hours (SH) Enrolled for All Students Enrolled in Central Florida Community College 1974-1975



X. RECOMMENDATIONS AND IMPLICATIONS

The results of this study indicate that there were no significant differences in withdrawal rates for the groups studied. Apparently, the great amount of attention given to so-called "abuses" by G. I. Bill recipients is the result of individual cases rather than a general trend. This is also true of financial aid recipients. Of course, these statements can only be made for the 1974-1975 academic year at Central Florida Community College.

The Division of Community Colleges should require other community colleges to do similar studies. This would result in a base of empirical data which could be presented to the Veterans Administration as a basis for student progress policy proposals.

The student progress quotient is not an end in itself. It must be used along with the student's grade point average as a determinent for academic discipline. Extenuating circumstances must also be considered on an individual bases. Requirements for student progress can best be implemented by the use of an accelerating scale. As the student accumlates student semester hours, the grade point average requirements imposed by the college increases as a function of the total student semester hours earned. Likewise, the SPQ requirements must be developed in a similar fashion.

The first draft of the student progress policy for CFCC developed by the ad hoc committee, has a SPQ requirement of .33 for the first 9 SH attempted increasing to a .86 requirement for 74 SH attempted.

This scale is currently being revised to correspond with the findings of this paper. Certainly, based upon these findings, the maximun SPQ to be imposed should be about.80, with .75 probably more realistic.

Further study on the withdrawal rate and/or student progress quotient is in order. A statistical report based on individual WR's rather than totals would be of importance in monitoring performances of individual students. A better method of tracking financial aid and G. I. Bill recipients is necessary. Tabulations of SPQ and WR's must be done annually to determine if there is any change or trend in these figures. Trends must be studied in order to continuously monitor the SPQ as an effective measurement of academic achievement.

BIBLIOGRAPHY

Affifi, A. A. and Azen, S. P., Statistical Analysis - A Computer Oriented Approach, New York: Academic Press, 1972.

Central Florida Community College Catalog 1974-1975, (Ocala, Florida).

Fox, David J. The Research Process in Education, New York: Holt, Rinehart, and Winston, 1969.

Holscher, Harry H. Simplified Statistical Analysis, Boston: Cahners Books, 1971.

Institutional Self-Study 1972-1973, Central Florida Community College, (Ocala, Florida).

Kerlinger, Fred N. Foundations of Behavioral Research, New York: Holt, Rinehart, and Winston, 1964.

Spiegel, Murray R. Theory and Problems of Statistics. New York: Schaum Publishing Co., 1961.

Williams, Malcolm. "Laxness Runs Up GI Bill", Orlando Sentinel, (October 12, 1975) 1 - 2.

Winkler, Karen J. "Mustering Out the GI Bill", Chronicle of Higher Education, XI (October 14, 1975) 1 - 2.

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